

Notice of Reason for Rejection

Patent Application No.: P2000-125379

Date Drafted: December 25, 2002

Examiner: Kazuhisa OKA 7514 4M00

Representative: Masanori Shibano

Applied Provision: section 29(1), section 29(2)

This application should be rejected for the following reason(s). If you have any comment thereon, please submit a response within 60 days from the mailing date of this notice.

Reason(s)

- (1) The invention(s) in the claim(s) indicated below of this application was described in a distributed publication indicated below or made available to the public through electric telecommunication lines in Japan or elsewhere prior to the filing of the patent application. Therefore, the invention(s) shall not be granted for a patent under patent law section 29(1)-3.
- (2) The invention(s) in the claim(s) indicated below of this application could easily have been made, prior to the filing of the patent application, by a person with ordinary skill in the art to which the invention pertains, described in a distributed publication indicated below or made available to the public through electric telecommunication lines in Japan or elsewhere prior to the filing of the patent application. Therefore, the invention(s) shall not be granted for a patent under patent law section 29(2).

Note (cited reference(s): see the list of references cited)

- claim(s): 1
- reason(s): 1, 2
- cited reference(s): 1
- comment

See the structure shown in Fig. 3 of Reference 1.

- claim(s): 1, 2
- reason(s): 1, 2
- cited reference(s): 2
- comment

See the structure shown in the cross-sectional view in the embodiment of Reference 2. An N epitaxial layer 22 corresponds to a drift layer of the present application. An N enhanced drift region 31 reduces on-resistance.

- claim(s): 3
- reason(s): 2
- cited reference(s): 1, 2
- comment

In reference 3, Fig. 2, steps of selectively oxidation and forming an impurity region adjacent to a gate electrode, etc. are disclosed. Since the ion-implant scheme is known manufacturing process, and it might have been applied if necessary. The reduced on-resistance advantage of the present application is regarded as the effect by providing an impurity layer of a second conductive type, and there is no special advantage by the manufacturing method. Therefore, it would have been obvious at manufacturing the structure of References 1, 2.

Regarding the invention(s) in the claim(s) except the claim(s) pointed out in this notice, reason for refusal is not found at this time. However, if the reason for refusal is newly found, you will be noticed the reason for rejection.

List of References Cited

- 1) Japanese Unexamined Patent Publication No. S60-198780
- 2) Japanese Unexamined Patent Publication No. H10-506755
- 3) Japanese Unexamined Patent Publication No. H06-120497

Record of the Result of Prior Art Search

Reference No. KIA1000028

Mailing No. 441567

Date Mailed: January 7, 2003

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- Field Searched: Int. Cl.⁷ H01 L29/78

This record of the Result of Prior Art Search is not a component of the reason for rejection.